

CLAIMS

What is claimed is:

1. A communication control program to cause a computer including a plurality of control means for controlling data communication in a hierarchical configuration and data transfer control means for controlling data transfer among the plurality of control means for controlling data communication, wherein the program causes the computer to perform:

anomaly judgment processing to judge whether received data contain an anomaly indication indicating occurrence of an anomalous event , and upon detection of the anomaly indication, to add anomaly information into data to be transferred to the plurality of control means for controlling data communication, in the data transfer control means for controlling data transfer; and

discard instruction processing to send the data containing the added anomaly information at substantially the same time to the plurality of control means for controlling data communication or to the plurality of control means for controlling data communication other than the control means for controlling data communication which has transmitted the data containing the anomaly indication, in the data transfer control means for controlling data transfer.

2. A communication control program according to claim 1, wherein the program further causes the computer to perform discard processing to discard the data containing the anomaly

indication and data relating thereto, upon detecting the anomaly indication by the anomaly judgment processing, in the data transfer control means for controlling data transfer.

3. A program recording medium recording a communication control program to cause a computer including a plurality of control means for controlling data communication in a hierarchical configuration and data transfer control means for controlling data transfer among the plurality of control means for controlling data communication, wherein the program causes the computer to perform:

anomaly judgment processing to judge whether received data contain an anomaly indication indicating occurrence of an anomalous event, and upon detection of the anomaly indication, to add anomaly information into data to be transferred to the plurality of control means for controlling data communication, in the data transfer control means for controlling data transfer; and

discard instruction processing to send the data containing the added anomaly information at substantially the same time to the plurality of control means for controlling data communication or to the plurality of control means for controlling data communication other than the control means for controlling data communication which has transmitted the data containing the anomaly indication, in the data transfer control means for controlling data transfer.

4. A program recording medium according to claim 3, wherein the program further causes the computer to perform discard processing to discard the data containing the anomaly indication and data relating thereto, upon detecting the anomaly indication by the anomaly judgment processing, in the data transfer control means for controlling data transfer.

5. A communication control method performed in a computer including a plurality of control means for controlling data communication in a hierarchical configuration and data transfer control means for controlling data transfer among the plurality control means for controlling data communication, wherein the method comprising the steps of:

judging whether received data contain an anomaly indication indicating occurrence of an anomalous event, in the data transfer control means for controlling data transfer;

adding, upon detection of the anomaly indication, anomaly information into data to be transferred to the plurality of control means for controlling data communication, in the data transfer control means for controlling data transfer; and

sending the data containing the added anomaly information at substantially the same time to the plurality of control means for controlling data communication or to the plurality of control means for controlling data communication other than the control means for controlling data communication which has transmitted the data containing the anomaly

indication, in the data transfer control means for controlling data transfer.

6. A communication control method according to claim 5, further comprising the step of:

discarding the data containing the anomaly indication and data relating thereto, upon detecting the anomaly indication in the step of the judging, in the data transfer control means.

7. A data processing apparatus comprising:

a plurality of control means for controlling data communication in a hierarchical configuration; and

data transfer control means for controlling data transfer among the plurality of control means for controlling data communication,

wherein the data transfer control means further comprising:

anomaly judgment means for judging whether received data contain an anomaly indication indicating occurrence of an anomalous event;

anomaly setting means for adding, upon detection of the anomaly indication, anomaly information into data to be transferred to the plurality of control means for controlling data communication; and

discard instruction means for sending the data containing the added anomaly information at substantially the

same time to the plurality of control means for controlling data communication or to the plurality of control means for controlling data communication other than the control means for controlling data communication which has transmitted the data containing the anomaly indication.

8. A communication control apparatus according to claim 7, further comprising:

data discarding means for discarding the data containing the anomaly indication and data relating thereto, when the anomaly judgment means detects the anomaly indication.